

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/000012

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07K14/22 A61K39/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 297 844 A2 (HEALTH PROTECTION AGENCY) 2 April 2003 (2003-04-02)	5-8, 12
Y	the whole document	9, 10
Y	SARDINAS G ET AL: "Anti-PorA antibodies elicited by immunization with peptides conjugated to P64k" BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol. 277, no. 1, 14 October 2000 (2000-10-14), pages 51-54, XP002314670 ISSN: 0006-291X the whole document	1-12
Y	US 2003/059444 A1 (ZOLLINGER WENDELL D ET AL) 27 March 2003 (2003-03-27) the whole document	1-12
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

24 January 2005

Date of mailing of the international search report

14/02/2005

Name and mailing address of the ISA

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International Application No

PC/7/CU2004/000012

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	SAUNDERS NANCY B ET AL: "Immunogenicity of intranasally administered meningococcal native outer membrane vesicles in mice" INFECTION AND IMMUNITY, vol. 67, no. 1, January 1999 (1999-01), pages 113-119, XP002314671 ISSN: 0019-9567 the whole document -----	1-12
Y	WO 03/051379 A1 (HEALTH PROTECTION AGENCY; FOSTER, KEITH, ALAN; GORRINGE, ANDREW, RICHA) 26 June 2003 (2003-06-26) the whole document -----	1-12
Y	WO 01/91788 A1 (STATENS INSTITUTT FOR FOLKEHELSE; ROSENQVIST, EINAR; HARBAK, KARI; NOR) 6 December 2001 (2001-12-06) the whole document -----	1-12
Y	WO 01/09350 A2 (SMITHKLINE BEECHAM BIOLOGICALS S.A; BERTHET, FRANCOIS-XAVIER, JACQUES;) 8 February 2001 (2001-02-08) the whole document -----	1-12
Y	JIN ZHIGANG ET AL: "Preparation and characterization of group A meningococcal capsular polysaccharide conjugates and evaluation of their immunogenicity in mice." INFECTION AND IMMUNITY, vol. 71, no. 9, September 2003 (2003-09), pages 5115-5120, XP002314672 ISSN: 0019-9567 the whole document -----	9, 10
A	WO 00/25811 A2 (MICROBIOLOGICAL RESEARCH AUTHORITY CAMR ; ROBINSON, ANDREW; GORRINGE,) 11 May 2000 (2000-05-11) the whole document -----	
P,A	WO 2004/019977 A2 (CHIRON SRL; PIZZA, MARIAGRAZIA; SERRUTO, DAVIDE; RAPPUOLI, RINI) 11 March 2004 (2004-03-11) the whole document -----	
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PCT/CU2004/000012

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>GUILLEN G ET AL: "Cloning and expression of the porA gene of the Neisseria meningitidis strain B:4:P1.15 in Escherichia coli preliminary characterization of the recombinant polypeptide" ACTA BIOTECHNOLOGICA, vol. 16, no. 2-3, 1996, pages 165-173, XP002314673 ISSN: 0138-4988 the whole document</p>	
P,Y	<p>----- CARMENATE TANIA ET AL: "Effect of conjugation methodology on the immunogenicity and protective efficacy of meningococcal group C polysaccharide-P64k protein conjugates" FEMS IMMUNOLOGY AND MEDICAL MICROBIOLOGY, vol. 40, no. 3, 9 April 2004 (2004-04-09), pages 193-199, XP002314674 ISSN: 0928-8244 the whole document</p>	1-12
P,Y	<p>----- HERMIDA LISSET ET AL: "A dengue-2 Envelope fragment inserted within the structure of the P64k meningococcal protein carrier enables a functional immune response against the virus in mice." JOURNAL OF VIROLOGICAL METHODS, vol. 115, no. 1, January 2004 (2004-01), pages 41-49, XP002314675 ISSN: 0166-0934 the whole document</p> <p>-----</p>	1-12

INTERNATIONAL SEARCH REPORT

International application No.

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Box No. 1 Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

a. type of material

☐

a sequence listing

☐

table(s) related to the sequence listing

b. format of material

☐

in written format

☐

in computer readable form

c. time of filing/furnishing

☐

contained in the international application as filed

☐

filed together with the international application in computer readable form

☐

furnished subsequently to this Authority for the purpose of search

2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

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International Application No
PCT/JP2004/000012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1297844	A2	02-04-2003	AT 242640 T 15-06-2003
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2004019977	A2	11-03-2004	NONE

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